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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,680	06/01/2001	Eliot M. Case	1809 USW 0613 PUS	2909

22193 7590 04/22/2004

QWEST COMMUNICATIONS INTERNATIONAL INC
LAW DEPT INTELLECTUAL PROPERTY GROUP
1801 CALIFORNIA STREET, SUITE 3800
DENVER, CO 80202

EXAMINER

VO, HUYEN X

ART UNIT	PAPER NUMBER
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2655

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DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,680

Applicant(s)

CASE ET AL.

Examiner

Huyen Vo

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/6/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's argument with respect to claims 1-18 regarding the a method of generating and using the complex tones as a guide to allow the voice talent to recite the particular speech item in accordance with the particular inflection have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasper et al. (US Patent No. 5278943) in view of Tubman et al. (US Patent No. 5820384).

1. Referring to claims 1 and 10, Gasper et al. discloses a method of making a digital voice library and a digital library utilized for converting text to concatenated voice in accordance with a set of playback rules (col. 2, ln. 64-67),

the digital voice library including a plurality of speech items and a corresponding plurality of voice recordings wherein each speech item corresponds to at least one

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available voice recording, wherein multiple voice recordings that correspond to a single speech item represent various inflections of that single speech item (col. 3, ln. 1-51), the digital voice library further comprising a particular voice recording of a particular speech item, the particular voice recording requiring a particular inflection (col. 13, ln. 20-25)

and being made by:

establishing a vocal sequence (col. 9, ln. 16-17);

recording a voice talent uttering the vocal sequence (col. 9, ln. 18-35);

Gaspar et al. fail to specifically disclose a method for generating a complex tone that reflects a particular inflection required for a particular voice recording of a particular speech item, the complex tone being composed of portions of the recording of the voice talent uttering the vocal sequence and for recording the voice talent reciting the particular speech item, to make the particular voice recording, the voice talent using the complex tone as a guide to allow the voice talent to recite the particular speech item in accordance with the particular inflection.

However, Tubman et al. teach a method for generating a complex tone that reflects a particular inflection required for a particular voice recording of a particular speech item, the complex tone being composed of portions of the recording of the voice talent uttering the vocal sequence (col. 6, ln. 43-57, through the listening mode) and for recording the voice talent reciting the particular speech item, to make the particular voice recording, the voice talent using the complex tone as a guide to allow the voice talent to recite the particular speech item in accordance with the particular inflection (col. 17, ln. 31-56, listeners make recordings of their practice attempts). The advantage

of using the teaching of Tubman et al. in Gasper et al. is to assist music listeners to practice songs by singing along with the karaoke system.

Since Gasper et al. and Tubman et al. are analogous art because they are from the same field of endeavors it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gasper et al. by incorporating the teaching of Tubman et al. in order to assist music listeners to practice songs by singing along with the karaoke system.

2. Referring to claim 2-4 and 11-13, Gasper et al. further disclose that establishing the vocal sequence and recording the voice talent further comprise: establishing the vocal sequence as a sequence of words (col. 9, ln. 16-17);

Gasper et al. fails to specifically disclose speaking tones, humming tones, and singing tones, but suggests "different prosodic environments" (col. 13, ln. 20-25). It is known in the art that speaking tones, humming tones, and singing tones are three different prosodic environments. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gasper et al. by specifically making records of these three different tones in order to provide the digital library a wide range of speech variations of a particular word to make the synthetic speech sound more naturally.

3. Referring to claims 5-7 and 14-16, Gasper et al. further disclose that the particular speech item is a phoneme (col. 3, ln. 4-5), a syllable (col. 4, ln. 1-2), and a word (col. 3, ln 4-5).

4. Referring to claims 8-9 and 17-18, Gasper et al. fail to specifically disclose that the particular speech item is a phrase and a sentence. However, Tubman et al. teach of recording utterances from speakers and store in files (col. 9, ln. 15-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to readily realize that making recordings of phrases and sentences would reduce processing time in searching and concatenating speech items for synthesis.

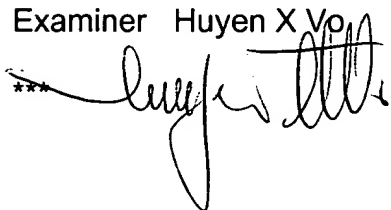
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 703-305-8665. The examiner can normally be reached on M-F, 9-5:30.

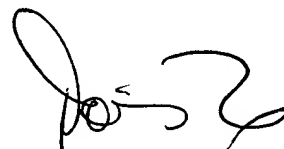
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Huyen X Vo

A handwritten signature in black ink, appearing to read 'Huyen X Vo', with three asterisks (***) to the left.

April 5, 2004

A handwritten signature in black ink, appearing to read 'Doris H. To', with a stylized flourish at the end.

DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800